Claims:

1. A method of regulating apoptosis in a cell, the method including the step of altering the expression and/or function in the cell of a polypeptide including an amino acid sequence selected from the group consisting of:
   (a) an amino acid sequence of SEQ ID No. 4;
   (b) an amino acid sequence of a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID No. 4; and
   (c) an amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID No. 4, or a biologically active fragment thereof.

2. A method according to claim 1, wherein the cell is a neuronal cell.

3. A method according to claim 1, wherein the cell is a non-neuronal cell.

4. A method according to claim 3, wherein the non-neuronal cell is a non-neuronal cell selected from the group consisting of a non-neuronal cell present in neural and brain tissue, an intestinal cell including a goblet cell, a lymph node cell, a spleen cell, a liver cell, a thymic cell, a salivary gland cell, a pituitary cell, a bladder cell, a bone cell, a breast cell, a cervical cell, a colorectal cell, a kidney cell, a laryngeal cell, a blood cell, a lung cell, a lymphatic cell, a skin cell, a plasma cell, a muscle cell, a cell of the mouth or throat, an ovary, a pancreatic cell, a prostate cell, a stomach cell, a testicular cell, a germ cell, a thyroid cell, and an uterine cell.

5. A method according to claim 1, wherein the apoptosis is mediated by a neurotrophin receptor and/or binding of a neurotrophin to a receptor.

6. A method according to claim 5, wherein the neurotrophin receptor is p75NTR.

7. A method according to claim 1, wherein the apoptosis is associated with a disease or condition involving dysregulation of apoptosis.

8. A method according to claim 7, wherein the disease or condition is selected from the group consisting of viral diseases including AIDS; fulminant hepatitis; neurodegenerative diseases including Alzheimer's disease, Parkinson's disease; dementia; demyelination diseases; cancers in which dysregulation of apoptosis is associated with development of the cancerous phenotype; amyotrophic lateral sclerosis; retinitis pigmentosa; cerebellar degeneration; myelodysplasis including aplastic anemia; ischemic diseases including myocardial infarction and stroke; hepatic diseases including alcoholic hepatitis, hepatitis B and hepatitis C; joint diseases including osteoarthritis; and atherosclerosis.

9. A method of regulating apoptosis in a cell, the method including the step of expressing in the cell a nucleic acid including a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence of SEQ ID No. 3, or RNA equivalent thereof;

(b) a nucleotide sequence at least 80% identical to a nucleotide sequence of SEQ ID No. 3, or RNA equivalent thereof;

(c) a nucleotide sequence complementary to SEQ ID No. 3, or RNA equivalent thereof;

(d) a nucleotide sequence at least 80% identical to a nucleotide sequence complementary to SEQ ID No. 3, or RNA equivalent thereof;

(e) a nucleotide sequence encoding a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID No. 4;

(f) a nucleotide sequence encoding an antisense nucleic acid that reduces the expression in the cell of a polypeptide including an

amino acid sequence of SEQ ID No. 4 or an amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID No. 4; and

(g) a nucleotide sequence encoding a ribozyme that cleaves a mRNA encoding an amino acid of SEQ ID No. 4 or an amino acid sequence 90% identical to an amino acid sequence of SEQ ID No. 4.

10. A method according to claim 9, wherein the cell is a neuronal cell.

11. A method according to claim 9, wherein the cell is a non-neuronal cell.

12. A method according to claim 11, wherein the non-neuronal cell is a non-neuronal cell selected from the group consisting of a non-neuronal cell present in neural and brain tissue, an intestinal cell including a goblet cell, a lymph node cell, a spleen cell, a liver cell, a thymic cell, a salivary gland cell, a pituitary cell, a bladder cell, a bone cell, a breast cell, a cervical cell, a colorectal cell, a kidney cell, a laryngeal cell, a blood cell, a lung cell, a lymphatic cell, a skin cell, a plasma cell, a muscle cell, a cell of the mouth or throat, an ovary, a pancreatic cell, a prostate cell, a stomach cell, a testicular cell, a germ cell, a thyroid cell, and an uterine cell.

13. A method according to claim 9, wherein the apoptosis is mediated by a neurotrophin receptor and/or binding of a neurotrophin to a receptor.

14. A method according to claim 13, wherein the neurotrophin receptor is p75NTR.

15. A method according to claim 9, wherein the apoptosis is associated with a disease or condition involving dysregulation of apoptosis.

16. A method according to claim 15, wherein the disease or condition is selected from the group consisting of viral diseases including AIDS; fulminant hepatitis; neurodegenerative diseases including Alzheimer's disease, Parkinson's disease; dementia; demyelination diseases; cancers in which dysregulation of apoptosis is associated with development of the cancerous phenotype; amyotrophic lateral sclerosis; retinitis pigmentosa; cerebellar degeneration; myelodysplasis including aplastic anemia; ischemic diseases including myocardial infarction and stroke; hepatic diseases including alcoholic hepatitis, hepatitis B and hepatitis C; joint diseases including osteoarthritis; and atherosclerosis.

17. A method of regulating proliferation of a cell, the method including the step of altering the expression and/or function in the cell of a polypeptide including an amino acid sequence selected from the group consisting of:

(a) an amino acid sequence of SEQ ID No. 4;

(b) an amino acid sequence of a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID No. 4 and

(c) an amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID No. 4, or biologically active fragment thereof.

18. A method according to claim 17, wherein the cell is a neuronal cell.

19. A method according to claim 17, wherein the cell is a non-neuronal cell.

20. A method according to claim 19, wherein the non-neuronal cell is a non-neuronal cell selected from the group consisting of a non-neuronal cell present in neural and brain tissue, an intestinal cell including a goblet cell, a lymph node cell, a spleen cell, a liver cell, a thymic cell, a salivary gland cell, a pituitary cell, a bladder cell, a bone cell, a breast cell, a cervical cell, a colorectal cell, a kidney cell, a laryngeal cell, a blood cell, a lung cell, a lymphatic cell, a skin cell, a plasma cell, a muscle cell, a

cell of the mouth or throat, an ovary, a pancreatic cell, a prostate cell, a stomach cell, a testicular cell, a germ cell, a thyroid cell, and an uterine cell.

21. A method according to claim 17, wherein the proliferation is mediated by a neurotrophin receptor and/or binding of a neurotrophin to a receptor.

22. A method according to claim 21, wherein the neurotrophin receptor is p75NTR.

23. A method of regulating proliferation of a cell, the method including the step of expressing in the cell a nucleic acid including a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence of SEQ ID No. 3, or RNA equivalent thereof;

(b) a nucleotide sequence at least 80% identical to a nucleotide sequence of SEQ ID No. 3, or RNA equivalent thereof;

(c) a nucleotide sequence complementary to SEQ ID No. 3, or RNA equivalent thereof;

(d) a nucleotide sequence at least 80% identical to a nucleotide sequence complementary to SEQ ID No. 3, or RNA equivalent thereof;

(e) a nucleotide sequence encoding a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID No. 4;

(f) a nucleotide sequence encoding an antisense nucleic acid that reduces the expression in the cell of a polypeptide including an amino acid sequence of SEQ ID No. 4 or an amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID No. 4; and

(g) a nucleotide sequence encoding a ribozyme that cleaves a mRNA encoding an amino acid of SEQ ID No. 4 or an amino acid

sequence 90% identical to an amino acid sequence of SEQ ID No. 4.

24. A method according to claim 23, wherein the cell is a neuronal cell.

25. A method according to claim 23, wherein the cell is a non-neuronal cell.

26. A method according to claim 25, wherein the non-neuronal cell is non-neuronal cell selected from the group consisting of a non-neuronal cell present in neural and brain tissue, an intestinal cell including a goblet cell, a lymph node cell, a spleen cell, a liver cell, a thymic cell, a salivary gland cell, a pituitary cell, a bladder cell, a bone cell, a breast cell, a cervical cell, a colorectal cell, a kidney cell, a laryngeal cell, a blood cell, a lung cell, a lymphatic cell, a skin cell, a plasma cell, a muscle cell, a cell of the mouth or throat, an ovary, a pancreatic cell, a prostate cell, a stomach cell, a testicular cell, a germ cell, a thyroid cell, and an uterine cell.

27. A method according to claim 23, wherein the proliferation is mediated by a neurotrophin receptor and/or binding of a neurotrophin to a receptor.

28. A method according to claim 27, wherein the neurotrophin receptor is p75NTR.

29. An agent for regulating cell apoptosis and/or proliferation, wherein the administration of an effective amount of the agent to a cell alters the expression and/or function in the cell of a polypeptide including an amino acid sequence selected from the group consisting of:

(a) an amino acid sequence of SEQ ID No. 4;

(b) an amino acid sequence of a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID No. 4; and

(c) an amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID No. 4, or a biologically active fragment thereof.

30. An agent according to claim 29, wherein the agent is an antisense nucleic acid.

31. A composition for regulating apoptosis and/or cell proliferation, the composition including a polypeptide including an amino acid sequence selected from the group consisting of:

(a) an amino acid sequence of SEQ ID No. 4;

(b) an amino acid sequence of a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID No. 4; and

(c) amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID No. 4, or a biologically active fragment thereof.

32. An antibody raised against a polypeptide including an amino acid sequence selected from the group consisting of:

(a) an amino acid sequence of SEQ ID No. 4;

(b) an amino acid sequence encoding a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID No. 4;

(c) an amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID No. 4, or a biologically active fragment thereof; and

(d) an amino acid sequence encoding an immunogenic fragment of a polypeptide having an amino acid sequence of SEQ ID No. 4.

33. An antibody that detects a polypeptide including an amino acid sequence selected from the group consisting of:

(a) an amino acid sequence of SEQ ID No. 4;

(b) an amino acid sequence encoding a biologically active fragment of a polypeptide having an amino acid sequence of SEQ ID No. 4;

(c) an amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID No. 4, or a biologically active fragment thereof; and

(d) an amino acid sequence encoding an immunogenic fragment of a polypeptide having an amino acid sequence of SEQ ID No. 4.

34. An antisense nucleic acid that reduces the expression in a cell of a polypeptide including an amino acid of SEQ ID NO:4 or an amino acid sequence at least 90% identical to an amino acid sequence of SEQ ID NO. 4